

## **CSREES Portfolio Review Expert Panel Report Summary**

### **Portfolio 1.5.1 Plant Production CY 1999-2003**

#### **SUMMARY**

*External Review Completed: May 2004*

#### **Portfolio Description**

The CSREES Plant Production Portfolio has been defined as those research, extension, and education programs aligned with six knowledge areas (KAs) related to the efficiency of plant production systems. Plant Protection focuses on most of the key factors relating to insects, other arthropods, pathogens, vertebrates, mollusks, and weeds that can impact output from plant production and/or pest and disease management systems. The portfolio consists of the following six Knowledge Areas:

- KA 201 Plant Breeding, Genome, Genetics, and Genetic Mechanisms
- KA 202 Plant Genetic Resources
- KA 203 Plant Biological Efficiency and Abiotic Stresses
- KA 204 Plant Product Quality and Utility – Preharvest
- KA 205 Plant Management Systems
- KA 206 Basic Plant Biology

#### **Summary of Comments and Recommendations**

In 2004 a panel comprised of independent experts from the field was convened to assess and score the current state of the Plant Production Portfolio. A discussion of specific comments and recommendations related to each of the dimensions of the three Office of Management and Budget (OMB) research and development (R&D) criteria used (relevance, quality, and performance) is provided below.

##### Relevance

The scope of the portfolio was wide-ranging, targeted towards nationally significant issues and maintained an outstanding focus on time-sensitive issues. Overall, the Review Panel believes that the relevance of the Plant Production Portfolio is very good. The chief weakness relates to integration of education and extension with research.

##### Quality

The Portfolio benefited from sufficient stakeholder input and demonstrated good improvement from 1999-2003. Good alignment was found in areas such as plant pathology, and the use of cutting edge technology was observed in some portfolio areas. The data presented was of high quality, but metrics were limited and not presented for all areas. It is clear that CSREES needs an effective reporting system and to better delineate Portfolio goals and objectives.

##### Performance

To fully judge this Portfolio, additional documentation and evidence is needed. A Review Panel must be able to better understand the indicators about which it is asked to comment. The Panel rated this performance area adequate, although this was done on the basis of personal experience and not presented evidence. The Portfolio needs to address the issue of documentation and evidence and implement a better reporting system before the next review.

##### General Comments

The Review Panel commends the Plant Production Portfolio National Program Leaders (NPLs) for the enthusiasm and professional competence exhibited in their presentations. The Review Panel also recognizes that there are significant constraints faced by NPLs in the performance of their roles. Most notably there is a lack of control over programs at the national level and funding of most programs reside at the state level. Additionally, the Plant Production Portfolio has heterogeneous responsibilities distributed among NPLs. For example, some NPLs are responsible for competitive grants programs and are not within the same unit as the other NPLs. Finally, optimal integration of education, extension and research is still not apparent ten years after the creation of CSREES from the Extension Service and CSRS.

### **Comments on Future Directions presented by CSREES**

First NPLs should use a common format to describe their KAs. Second, administrators should prepare and include in the Portfolio documents a clear, comprehensive description of the role of the NPL; individual NPLs have different perceptions of their role. The Portfolio documents should also include an organizational chart, a state-by-state breakdown of information and more managerial level summary statistics such as SYs (Scientist years), PYs (Professional years); Graduate Student and Post Doctoral Students numbers.

#### Data Issues

In general, the availability, quantity and quality of data on integration of research, higher education, and extension were among the most obvious shortcomings of the CRIS system, evidenced in the self-review document and NPL oral presentations. The Portfolio needs to address the issue of documentation and evidence and implement a better reporting system.

There needs to be more evidence available that shows the productivity and economic impacts of the Portfolio. This evidence might include lists of publications, patents, and other social or physical measures.

#### Evaluation Issues

There is no evidence of the Portfolio's productivity and impacts, such as social or physical measures that would have come from program evaluation results.

The Panel suggested that performance indicators be presented to make it possible for the Panel to fully judge the performance and completeness of the Portfolio.

### **Portfolio Score**

Portfolio 1.5.1 received a total score of 81 from the panel. This score places the portfolio in the category 'moderately effective in supporting CSREES objectives.'